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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,116	09/18/2000	Wilhelm F. Maier	STUDIEN 272-	7894

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EXAMINER
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FRIEND, TOMAS H F

ART UNIT	PAPER NUMBER
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1639

DATE MAILED: 10/21/2002 11

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/582,116

Applicant(s)

MAIER ET AL.

Examiner

Tomas Friend

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 7-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 8-15 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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## **Detailed Action**

### **Change of Art Unit Designation**

**Please note:** The Art Unit location of this application in the PTO has changed from Art Unit 1627 to Art Unit 1639. To aid in matching papers to this application, all further correspondence regarding this application should be directed to **Group Art Unit 1639**.

### **Status of the Application**

Receipt is acknowledged of a response to an office action with amendment on 25 June 2002 (Paper No. 9) and an information disclosure statement on 18 July 2002 (Paper No. 10).

### **Status of the Claims**

Claims 1-15 were pending in the application. Claims 2 and 6 were cancelled in Paper No. 9. Claims 1, 3-5, and 7-15 are pending and examined on their merits.

### **Withdrawn Rejections**

1. The rejections of claims 1, 4, 6, 8, 13, and 15 under 35 U.S.C. 112, second paragraph, made in Paper No. are withdrawn in response to applicants' amendment to the claims.
2. All outstanding rejections of claims 2 and 6 are withdrawn in response to the cancellation of these claims.

### **Maintained Rejections and Objections**

The statutory basis for each of the following rejections may be found in a prior office action.

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3. Claim 7 remains objected to for depending from a rejected claim.

**Maintained Rejections – 35 U.S.C. 102/103**

4. Claims 1, 3-5, and 9-14 remain rejected under 35 U.S.C. 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being unpatentable over Wilson, III U.S. Patent 6,063,633 May 2000.

The rejection is reproduced below for applicants' convenience.

The Wilson, III reference teaches the thermographic measurement of catalyzed reactions (i.e. comparative determination of heat changes caused by a chemical process) in column 1, lines 44-65. Column 3, lines 4-6 teaches that *"Thermography, as by an infrared camera recording the temperature at a number of catalyst sites simultaneously is particularly preferred."* Column 4, lines 51-55 teaches that localized temperature increases (or decreases) are measured.

The Wilson, III reference does not explicitly teach recording a difference image that *"corresponds to a subtraction of the infrared emission recorded prior to the beginning of the processes from the infrared emission recorded during the course of the processes."*

Simultaneously measuring the temperature changes at a number of catalytic sites using an infrared camera anticipates recording a *"difference image"* which *"corresponds to a subtraction of the infrared emission recorded prior to the beginning of the processes from the infrared emission recorded during the course of the processes"* because the simultaneous recording produces an image. That image, which must inherently include information about **changes** in temperature **must** therefore *"correspond to"* a *"subtraction of the infrared emission recorded prior to the beginning of the processes from the infrared emission recorded during the course of the processes."* See column 6, lines 8-12, which teaches the storage of digital maps used to normalize infrared energy flu and improve accuracy of local temperature measurements. See also claims 32 and 33.

Alternatively, an image of the sites in which the temperatures before the processes have been subtracted from the temperatures during and/or after the processes. One of ordinary skill in the art would have recognized that simultaneously measuring the temperature changes at a number of catalytic sites *"corresponds to"* an image of the sites in which the temperatures before the processes have been subtracted from the temperatures during and/or after the processes.

Column 2, lines 14-22 teaches that catalyst libraries may be placed onto supports (library plates). Column 2, lines 1-46 teaches that catalysts may be metals that are deposited as oxides that result from decomposition of organic or inorganic compounds. Catalysts may be deposited using slurries or by precipitating solutions (i.e. aqueous or alcoholic solutions). Example 12 teaches the use of metal oxalate (carboxylate) salt solutions to deposit catalysts into a microtiter dish by drying. Zeolites as catalysts is taught in column 2, lines 19-22. Metallocene catalysts arrays are taught in column 11, lines 21-23. The use of clays and carbon as support materials (i.e. library plates having low infrared reflectivity) is taught in column 2, lines 14-15. A Teflon

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block monolith (i.e. library plate coated with a non-wetting material) is taught in column 8, lines 23. The use of wavelength-specific filters and infrared-transparent windows are taught, for example in column 5, Example 3.

Applicants argue that the Wilson, III reference does not anticipate the presently claimed invention because difference imaging is not explicitly disclosed and is not inherent in the cited reference.

Applicant's arguments have been fully considered but they are not persuasive. One of ordinary skill in the art would have immediately envisaged the use of a difference image as a means of recording changes in temperature with time. Difference imaging was a well-established technique at the time and one of a small number of ways (i.e. species of a small generic) for assessing changes that take place over time. Alternatively, it would have been obvious to one of ordinary skill in the art at the time that the invention was made to use difference imaging for the same reasons.

Applicants argue that the present invention permits the recordation of even small heat changes, which previously had not been measurable.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the recordation of even small heat changes, which previously had not been measurable) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### **New Grounds of Rejection**

The statutory basis for each of the following rejections not found below may be found in a prior office action. The rejections are necessitated by applicants' amendment.

**New Grounds of Rejection – 35 U.S.C. 112, second paragraph**

5. Claims 1, 8 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The rejected claims have been amended to recite “*an infrared reflectivity close to the infrared reflectivity of a black body.*” One of ordinary skill in the art would not be able to determine the metes and bounds off the claimed invention because one would not know how close the reflectivity must be to that of a black body to be encompassed by the claims or what means to use for measuring the closeness of the reflectivity.

**Allowable Subject Matter**

6. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tomas Friend** at telephone number **(703) 308-4548**. The examiner's normal schedule is four, ten-hour days per week including Saturdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on (703) 306-3217. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-2742.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist at (703) 308-1235.

Tomas Friend, Ph.D.  
19 October 2002

  
**PADMASHRI PONNALURI**  
**PRIMARY EXAMINER**